INTERNASIONAL CONFERENCE ON
MULTIDISCIPLINARY APPROACHES IN HEALTH SCIENCE
VOLUME 2 , ISSN 3032-4408 (Online)
https://ejournal.poltekkes-denpasar.ac.id/index.php/icmahs

The Effect of Educational Kits for Pregnant Women with Demonstration Methods on Preparedness for Pregnant Women in Health Crisis Situations in the Baluse Health Center Area, Sigi Regency

Kharissa Rinandyawati [*], Siti Hadijah Batjo [1], Sarliana[2]
[1] *Department of Midwifery, Poltekkes Ministry of Health Palu, Indonesia*
email : kharissarinandyawati@gmail.com

Article history
Posted : 2024-12-09
Reviewed : 2024-10-29
Received : 2024-10-03

ABSTRACT

(1) introduction : pregnant women are one of the vulnerable groups who are at high risk during a health crisis situation, so to anticipate this happening, as the main step for preparedness, it is necessary to prepare a kit for pregnant women to minimize the impact that can occur during a health crisis situation. According to Regional Board For Disaster management Sigi Regency. the Baluse Health Center area is an area that is vulnerable or has the potential for a health crisis to occur. One of them is that there has been a flash flood in 2019 which resulted in many pregnant women experiencing health problems due to lack of resources such as personal hygiene tools, clothing, clean water, etc in the refugee camps. (2) methods: The research method is pre-experimental design with one group pre-post test. The population in this study were all pregnant women in the Baluse Health Center, Sigi Regency. This study uses a total sampling technique, where the sampling is based on the total population 43 respondents and this research was conducted in February until August 2022. The instruments used were questionnaires and pregnancy kits.(3)result: The results showed that there was an impact to educate pregnant women with the demonstration method in a health crisis situation. The results of the Wilcoxon test were obtained = 0.000 < 0.005.(4)conclusions: The conclusion is that there is an effect of educating pregnant women with the demonstration method on increasing the preparedness of pregnant women in a health crisis situation in the Baluse Health Center area, Sigi Regency. It is hoped that the Baluse Health Center can improve the preparedness of pregnant women, especially in the preparation of the Kit for pregnant women as an effort to overcome in a health crisis situation.

Keywords: Pregnant women, Preparedness, Kit for pregnant women, Health crisis.

Introduction

A health crisis is an event or series of events that result in loss of life, injury/illness, displacement, and/or potential danger that impacts public health that requires a rapid response outside of normal practices and inadequate health capacity Contains background, rational and novelty research. Relevant references and libraries are raised in the background, justifying urgency, bringing up problems, selected solutions.

The incidence of health crises caused by natural disasters, non-natural disasters, and social disasters has increased every year. In 2018, there were 384 health crises, then increased to 449 in 2019, and in 2020 there was an increase from the previous year, which was 520 incidents. This shows an increasing trend in the incidence of health crises due to disasters, so that efforts are needed to prevent, mitigate and be prepared for the threat of natural disasters.

Central Sulawesi Province has experienced a health crisis due to natural disasters, namely an earthquake with a strength of 7.4 Mw (moment magnitude), tsunami and liquefaction which resulted in 2,113 people dead, 1,309 people missing, 4,612 people injured, and tens of thousands of buildings damaged (National Earthquake Study Center Team, 2018). Based on the 2020 Indonesian Disaster Risk Index (IRBI), Central Sulawesi has a risk index of 144.96 which is classified as high risk (BNPB, 2021).

The main thing that causes many victims due to disasters is because of the low level of community preparedness in anticipating the disaster. The main factors that are the key to preparedness are knowledge, attitude and concern for being ready when facing a disaster (Sato et al., 2016)

During emergency disaster situations, reproductive health needs are often neglected. The risk of complications in pregnant women in the third trimester when giving birth can increase, because they are forced to give birth without the help of health workers. The risk of sexual violence, unwanted pregnancy and HIV transmission can occur (Assistant Secretary for Preparedness and Response., 2021).

During the three months after the health crisis on September 28, 2018 in Central Sulawesi, reproductive health services from October to December 2018 provided by 15 reproductive health tents recorded 227 deliveries, 141 maternal neonatal referral cases, 3293 examinations of pregnant women, and 504 neonatal health services (Ministry of Health of the Republic of Indonesia, 2021). According to data from the United Nations Population Fund (UNFPA), 20% of pregnancies during the health crisis ended in miscarriage or unsafe abortion (Sidabutar, 2020).

Maternity kit is a package containing clothing, personal hygiene supplies, special medicines used during health crisis situations (Ministry of Health of the Republic of Indonesia, 2017). Preparing a maternity kit is one form of disaster management effort that must be available in health crisis situations because the need for reproductive health services remains and even increases, such as pregnant women who need services and can give birth at any time (Hildayanto, 2020).

Sigi regency has experiencing a disaster with evacuation conditions with minimal supplies of drinks/food, inadequate clothing materials, difficulty in accessing clean water, and lack of medicines have caused many pregnant women to experience physical and psychological disorders. Although the aid that came was not comparable in amount and only in the form of instant noodles, mineral water, and snacks, so if this continues to happen, it can cause pregnant women to experience serious impacts such as stress, malnutrition and reproductive health disorders (Baluase Health Center, 2021).

Based on the background description listed above, the researcher is interested in

conducting research to determine "The effect of education kits for pregnant women with demonstration methods on the preparedness of pregnant women in health crisis situations in the Baluase Health Center Area, Sigi Regency".

Research Method

A. Type and Research Design

The research design used is pre-experimental design with the one group pre-test and post-test design. In this study, the researcher conducted a pre-test first by giving a questionnaire directly before conducting counseling and then giving the post-test questionnaire again after counseling involving the same group to see the differences before and after the treatment was given.

B. Time and Place of Research

This research was conducted from February to August 2022, data collection in June in Bangga Village and Wisolo Village, Baluase Health Center Area, Sigi Regency.

C. Population and Sample

1. Population
   The population in this study were all pregnant women registered in Bangga Village and Wisolo Village, Baluase Health Center Area, Sigi Regency in May-June 2022. The population was 43 pregnant women, 23 pregnant women in Bangga Village and 20 pregnant women in Wisolo Village.
2. Sample

The sample of this study was all pregnant women in Bangga Village and Wisolo Village, Baluase Health Center Area, Sigi Regency. The sampling technique in this study was using Non Probability Sampling with a Total approach. So the number of samples in this study was 43 pregnant women.

Results and Discussions

1. Univariate Analysis

Table 1 Frequency Distribution of Pregnant Women Based on Characteristics

Variable	Frequency (f)	Percentage (%)
Age		
<20 Years	4	9,3
20-35 Years	35	81,4
>35 Years	4	9,3
Total	43	100
Education		
Primary School	6	14,0
Junior High School	17	39,5
Senior High School	20	46,5
Total	43	100

Table 1 shows that of the 43 respondents in this study, it can be seen that the distribution of respondents according to age is that the largest number of respondents is 20-35 years old, namely 35 people (81.4%) and the largest number of respondents who have education is high school, namely 20 people (46.5%).

Tabel 2 Frequency Distribution of Pregnant Women's Preparedness Regarding Pregnant Women's Kit Education with Demonstration Method in Health Crisis Situations

Preparedness Variable	*Pre-test*		*Post-test*	
	F	%	F	%
Low preparedness	38	88,4	22	51,2
Medium preparedness	4	9,3	16	37,2
High preparedness	1	2,3	5	11,6
Total	43	100	43	100

Table 2 shows that the respondents' preparedness before (pre-test) the provision of education kits for pregnant women using the demonstration method had a low level of preparedness, namely 38 (88.4%) and high preparedness of 1 (2.3%) then after (post-test) it was given, it showed an increase in high preparedness to 5 (11.6%) and a decrease in low preparedness to 22 (51.2%).

2. Bivariate Analysis

Table 3. The Effect of Providing Education Kits for Pregnant Women with Demonstration Methods on the Preparedness of Pregnant Women in Health Crisis Situations

pregnant women's preparedness	Rank	N	Mean Rank	Sum Of Rank	*ρ-value*
Pretest-Posttest	Negativ Rank	0	0,00	0,00	0,000
	Positiv Rank	19	10,00	190,00	
	Ties	24			
	Total	43			

*Wilcoxon Signed Rank Test

Table 3 shows the results of statistical analysis with the Wilcoxon Test obtained a negative value of rank 0, namely no respondents experienced a decrease in preparedness after being given education on pregnant women's kits with the demonstration method in health crisis situations, then a positive value of rank 19, namely there were 19 respondents who experienced an increase in preparedness after being given education on pregnant women's kits with the demonstration method demonstration in a health crisis situation, and ties 24 showed that 24 respondents who had equal preparedness before and after being given education on pregnant women's kits with the demonstration method or did not experience any changes in preparedness after being given education on pregnant women's kits with the demonstration method in a health crisis situation. While the average value or Mean Rank of respondents before and after education on pregnant women's kits with the demonstration method in a health crisis situation was 10.00.

Table 3 regarding the results of the Wilcoxon statistical test, the significance of ρ-value = 0.000 (P <0.05) was obtained so that the results of the hypothesis Ha were accepted and Ho was rejected, which means that there is an influence on the preparedness of pregnant women when providing education on pregnant women's kits with the demonstration method in a health crisis situation.

Based on univariate analysis, the characteristics of respondents according to age are the most, namely 20-35 years old with a total of 35 people (82.4%). According to the researcher's assumption, age is not entirely the main factor in forming preparedness because there are other factors to form preparedness such as disaster experience. Respondents with older ages but no disaster experience will have less preparedness when compared to young people who live in disaster-prone areas. This result is in line with the research of Asih Dwi Hayu Pangesti (2016) which concluded that there was no relationship between respondent age and disaster preparedness level with Pvalue = 0.875.

The highest educational status of respondents was Senior High School with a total of 20 people (46.5%). According to the researcher's assumption, formal education can increase preparedness. The higher the number of years an individual spends in education, the higher the level of preparedness of a person. According to Kumalawati, (2016) A person with a high level of education significantly increases preparedness because the higher a person's education, the more active they are in accessing more diverse information from several sources. However, Preparedness is not only from formal education but can also be obtained from communication media and disaster experiences.

The experience that a person has is one of the effective preventions and preparedness in a health crisis. Very different from people who have no previous experience, they will feel that disasters are very scary and do not have the preparedness to face disasters. This is in line with the opinion of Supriandi (2020) people who have disaster experience will feel that disasters will not damage them because they are more prepared to face disasters compared to those who have no previous disaster experience. Despite having disaster experience, the level of preparedness of pregnant women in the Baluase Health Center Area is still low, according to the results of the analysis before providing education about the pregnant women's kit with a demonstration method, it can be seen that 38 people (88.4%) have low preparedness.

According to the researcher's assumption, this is due to the lack of socialization of preparedness in areas prone to health crises, resulting in a lack of knowledge and preparation to have an emergency response plan such as providing a pregnant women's kit containing individual needs that can be used in a health crisis situation. This is in line with the opinion put forward by Erlia et al., (2017) which states that the lack of public knowledge (43%) regarding emergency response plans is an important part of a preparedness process, especially those related to emergency supply kits, water supplies and ready-to-eat food so that the impact of disaster risks can be minimized. This is supported by the opinion of Darwati (2021) that knowledge is the main factor and is the key to preparedness, the creation of knowledge about disasters is indicated by an understanding of environmental conditions.

The results of the bivariate analysis using the Wilcoxon Test obtained a positive rank value of 19, namely that 19 respondents experienced an increase in preparedness after providing education on pregnant women's kits with a demonstration method in a health crisis situation. According to the researcher's assumption, this happened because the information provided was conveyed well where the researcher used a pregnant women's kit media that could be shown and became an example of what needed to be prepared during

a health crisis, so that pregnant women were interested in paying attention and were aware of the importance of preparing a pregnant women's kit before a disaster occurred so that the results

This section answers the hypothesis/research objectives described in the background section and interprets the results that have been obtained. In this section more effort is made than in the background, methods and results section. In this section is focused on answering the question of why facts and data have been obtained. At its core this section is like the principle of a pyramid of special sections then extends which is supported by relevant studies.

According to the researcher's assumption, it is necessary to carry out comprehensive preparedness education and training to prepare the Maternity Kit in order to increase awareness and reduce the impact on pregnant women during a health crisis. The opinion of Widyaningrum et al., (2020) suggests that pregnant women will be able to receive this education when they know that a disaster can affect their family. Supplies for disaster preparedness equipment need to be prepared by families as listed in what they are likely to have and what they can do. This is in line with the opinion of Khatri et al., (2020) which states that institutions such as health workers, volunteers and the government can provide assistance in preparing disaster preparedness kits for pregnant families and also provide understanding and knowledge to pregnant women related to disaster management so that they understand the risks of disasters and are able to manage the risks that exist within themselves and their environment.

Conclusion

Based on the results of the study and discussion, it can be concluded that: the preparedness of pregnant women before the provision of education kits for pregnant women with demonstration methods in health crisis situations has a low level of preparedness, namely (88.4%), then after being given education kits for pregnant women with demonstration methods in health crisis situations, the low level of preparedness decreased to (51.2%). The provision of education kits for pregnant women with demonstration methods has a significant influence on increasing the preparedness of pregnant women in health crisis situations in the Baluase Health Center Area, Sigi Regency.

Suggestion

Researchers hoped that research can be conducted on other factors that can increase the knowledge and awareness of pregnant women regarding the importance of preparing themselves before a health crisis occurs and can develop this research by minimizing all obstacles that exist in this research.

Acknowledgement

The authors would like to thank Baluase Health Center and the respondents for giving the opportunity and helping to conduct the research.

Conflic of Interest

The obstacle in this study was the lack of feedback from respondents to prepare maternity kits because it requires quite a large cost.

Reference

BNPB. (2017). *Pedoman Latihan Kesiapsiagaan Bencana* (Vol. 1, Issue 1). https://doi.org/10.24198/jkk.v1i1.6031

BNPB. (2021). Indeks risiko bencana Indonesia (IRBI) tahun 2020. *Bnpb*, 78.

Darwati, L. E. (2021). *Rencana tanggap darurat masyarakat menghadapi bencana banjir*. *13*, 47–52.

Effendy, I. (2016). Pengaruh Pemberian Pre-Test dan Post-Test Terhadap Hasil Belajar Mata Diklat HDW.DEV.100.2.a pada Siswa SMK Negeri 2 Lubuk Basung. *Jurnal Ilmiah Pendidikan*, *1*(2), 81–88.

Erlia, D., Kumalawati, R., & Aristin, N. F. (2017). Analisis Kesiapsiagaan Masyarakat Dan Pemerintah Menghadapi Bencana Banjir Di Kecamatan Martapura Barat Kabupaten Banjar. *JPG (Jurnal Pendidikan Geografi)*, *4*(3), 15–24.

Hidayati, D., Widayatun, P. H., & Triyono, T. K. (2011). *Panduan Mengukur Kesiapsiagaan Masyarakat dan Komunitas Sekolah*. *January*, 2020–2024.

Hildayanto, A. (2020). *Pengetahuan dan Sikap Kesiapsiagaan Masyarakat terhadap Bencana Banjir di Kelurahan Mangunharjo Kecamatan TuguKota Semarang*. *Vol 4 No 4 (2020): HIGEIA: October 2020*. https://doi.org/https://doi.org/10.15294/higeia.v4i4.38362

Ika Fajarini, Y., & Amin Abdullah, A. (2018). Perangkat Kesiapsiagaan Bencana Untuk Wanita Hamil dan Pasca Melahirkan. *Indonesian Journalof Nursing Practice*, *2*(2), 90–95. https://doi.org/10.18196/ijnp.2284

Kementerian Kesehatan RI. (2017). *Pedoman dukungan logistik paket pelayanan awal minimum kesehatan. kesehatan reproduksi pada situasi krisis*.

Kementrian Kesehatan RI. (2017). *Pedoman Pelaksanaan PPAM Kespro pada Krisis Kesehatan*.

Kementrian Kesehatan RI. (2021). *Pedoman Pelaksanaan Paket Pelayanan Awal Minimum (PPAM) kesehatan reproduksi pada krisis kesehatan*. *April*.

Ketut Swarjanan. (2012). *Metodologi Penelitian Kesehatan* (R. W. & J. Simarmata (ed.); satu). Yayasan Kita Menulis.

Khatri, G. K., Tran, T. D., Baral, S., & Fisher, J. (2020). Experiences of an earthquake during pregnancy, antenatal mental health and infants' birthweight in Bhaktapur District, Nepal, 2015: A population-based cohort study. *BMC Pregnancy and Childbirth*, *20*(1), 1–12. https://doi.org/10.1186/s12884-020-0308